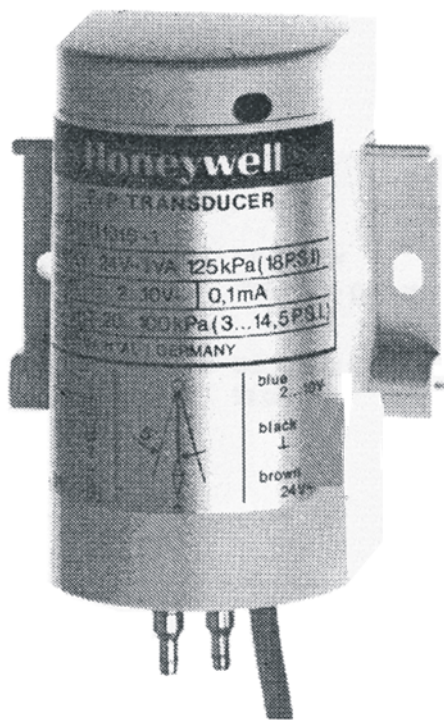


## RP7517A/B ELECTRONIC/PNEUMATIC TRANSDUCER

### PRODUCT DATA



### SPECIFICATIONS

Type No.	RP7517A	RP7517B
Power supply	none	+10% / -15% 24 V, 50/60Hz
Power consumption	0.15 W	1.7 VA
Input signal	2...10 V	
Min. current at 10 Vdc	(15 mA)	(0.1 mA)
Output pressure at 1.25 bar (125 kPa) main pressure	0.2...1.0 bar (20...100 kPa) at 2...10 Vdc	
	max. 0.035 bar (3.5 kPa) at 0 Vdc	
	min. 1.06 bar (106 kPa) at 11.5 Vdc	min 1.12 bar (112 kPa) at 11.5 Vdc
Main air pressure	1.25 bar (125 kPa)	
Main air pressure independence	1% per 0.1 bar main air pressure	
Maximum safe air	2.0 bar (200 kPa)	
Air consumption	42 NL/h (700 sccm) at 0.6 bar	
Air capacity	720 NL/h (12000 sccm)	
Air connections	Dual-barb-fittings for either 6 x 1 mm (1/4" O.D.) or 4 x 0.75 mm (5/32" O.D.) polyethylene tubing.	
Calibration	Factory calibrated	
Ambient temperature	5...55°C	
Storage	-30...+70°C	
Humidity	5...95% RH	

### APPLICATION

An E/P Transducer accepts a proportional voltage signal from an electronic controller and converts it into a proportional pneumatic signal of 0.2 to 1.0 bar to operate pneumatic actuators or reset pneumatic controllers.

The RP7517A accepts a 2...10 Vdc / 4...20 mA signal directly from a MicroniK 100 output. The RP7517B includes a voltage-to-current converter for use with an Excel DDC output and Delta CPA. It may also be used in applications where more than one transducer must be connected to one MicroniK 100 output. The RP7517B requires an external 24 Vac power supply.

All E/P-Transducers supplied with 1 m cable

### MAINTENANCE

A full range of maintenance programs is available from your local registered Honeywell office.

### WIRING

distance from E/P-Transducer to	type of wire	max. length	
controller or Delta CPA output	local standard	100 m	150 m
		1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>

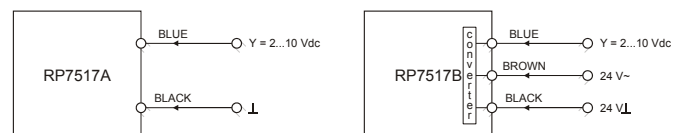


Fig. 1. Wiring and connections

**NOTE:** The E/P Transducer connection wire 24 V ⊥ (black) must be connected to the same potential 0 V level as the controller or Delta DGP.

## OPERATION

The basic operation is similar for both E/P-Transducers: The input signal 2...10 V is fed directly to a coil on the RP7517A or into a voltage to current converter in the RP7517B.

The current through the coil produces a magnetic force on the flapper. This force is balanced by the feedback force developed by the nozzles pressure on the opposite side of the flapper.

When the magnetic force on the flapper changes due to a change in current, the position of the flapper over the nozzle changes, and a new pressure is established. This pressure is used to pilot the pneumatic amplifier, which converts the low capacity pilot pressure to a high capacity branch line. The operation span is fixed and the start-point of the output signal is factory calibrated.

Both transducers are compensated to eliminate ambient temperature influence. The transducers are protected by a rigid plastic cover.

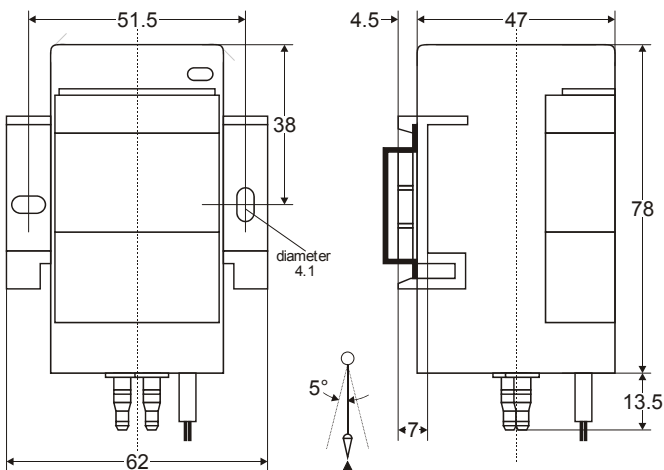


Fig. 2. RP7517A/B dimensions (in mm)

## MOUNTING

Wall mounting with two screws 4 mm diameter (see Fig. 2). Rail mounting using the European Standard Rail 35 x 7.5 (EN 50022) (see Fig. 3).

Mount the transducer in the vertical position ONLY with a maximum of 5 angular degree tolerance to the perpendicular line (see Fig. 2).

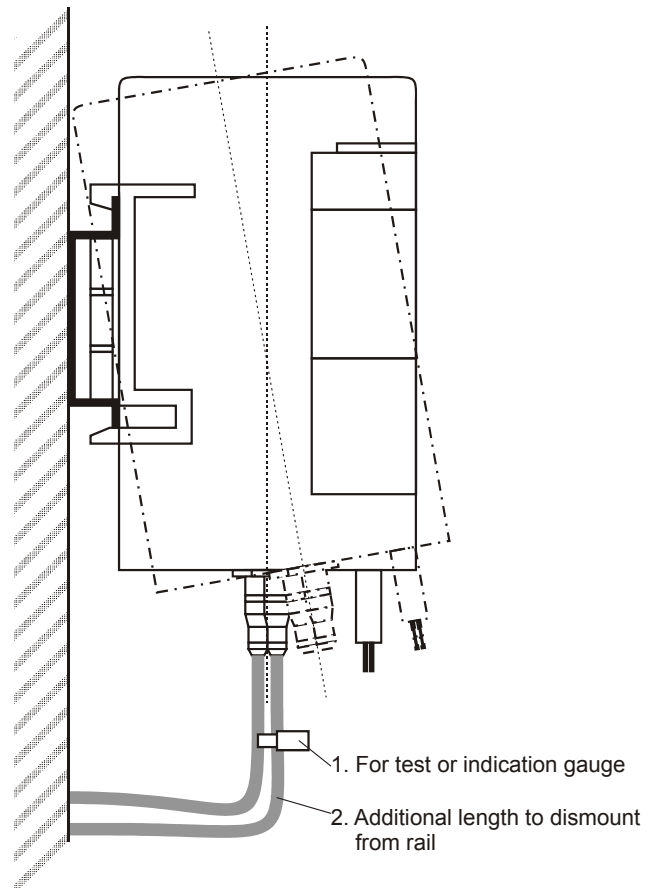


Fig. 3. Mounting

## START-UP INSTRUCTIONS

Before starting up the system, the following checks should be made on the transducer:

1. Check that main line pressure is available and input voltage is at maximum i.e. 12 Vdc.
2. Check that output pressure is at minimum, i.e. 112 kPa (1.12 bar) (RP7517A) or 120 kPa (1.2 bar) (RP7517B).
- 3a. If the output pressure is within the transducer rating, the system can be started up.
- 3b. If not, short out the contact pins with a screwdriver. When this is done, the sound of discharging air should be heard.
4. Check for correct output pressure build-up and repeat step 3(b) if transducer does not function correctly.

**Honeywell**

Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Ecublens, Route du Bois 37, Switzerland by its Authorized Representative:

### Automation and Control Solutions

Honeywell GmbH  
 Böblinger Strasse 17  
 71101 Schönaich / Germany  
 Phone: (49) 7031 63701  
 Fax: (49) 7031 637493  
<http://ecc.emea.honeywell.com>  
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